targeting peptide conjugate does not contain a classical nuclear localization signal.

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13. (Amended) Eukaryotic cells transfected with a complex comprising a plasmid containing a selected nucleic acid sequence and a scaffold-nuclear targeting peptide conjugate with the proviso that the scaffold-nuclear targeting peptide conjugate does not contain a classical nuclear localization signal.

REMARKS

Claims 1-13 are pending in this application. Claim 8 has been found to be allowable. Claims 1-7 and 9-13 have been rejected. Claims 1, 4, 7, 9, and 11-13 have been amended. No new matter has been added by these amendments. Reconsideration is respectfully requested in light of these amendments and the following remarks.

I. Acknowledgment of Previous Response to Arguments

The Examiner has acknowledged that the previous amendment, filed August 22, 2002, successfully overcame the objections to claim 1.

The Examiner has further acknowledged that the previous amendment, filed August 22, 2002, successfully overcame the Examiner's rejections under 35 USC 112, second paragraph.

The Examiner has yet further acknowledged that the previous amendment, filed August 22, 2002, successfully overcame the Examiner's rejection of claims 1-7 and 9-13 under 35 USC 102(b) over Jans et al.

II. Rejection of Claims under 35 U.S.C. § 102(b)

The Examiner has maintained the rejection of claims 1-7 and 9-13 under 35 U.S.C. § 102(b) as being anticipated by Thatcher et al. (WO 96/41606 published 12/27/96). The Examiner suggests that Thatcher et al. teach a composition comprising a cationic peptide scaffold (NBC2, page 8, line 20), the nuclear localization targeting peptide encoded by SEQ ID NO:3 of the instant invention (M9, comprising the NLS of hnRNP A1) wherein the scaffold and the targeting peptide are conjugated by a hydrolytic resistant linkage.

Applicant's previous argument recited that the claims of the instant application are explicitly drawn to nuclear targeting peptides containing a nonclassical, nuclear localization signal. In contrast, the section cited by the Examiner in Thatcher et al. relating to NBC2 shows the structure of NBC2 to contain a classical

nuclear localization signal SV40 NLS1 (see page 8, lines 12-13 of Thatcher et al.). The Examiner suggests that Applicant's argument was unpersuasive because while the claims require a non-classical NLS, they do not exclude the presence of a classical NLS. The Examiner further suggests that a composition comprising both classical and non-classical NLSs anticipates the claims.

Applicant respectfully traverses this rejection.

To anticipate a claim, a reference must teach every element of the claim. See MPEP § 2131. The cited reference does not teach every element of the invention as claimed.

Thatcher et al. does not disclose a composition with the physical characteristics of the present invention. However, in an earnest attempt to facilitate prosecution, claims 1, 4, 7, and 11-13 have been amended to recite that the nuclear targeting peptide of the instant invention does *not* contain a classical nuclear localization signal. Support for this amendment is found at page 8, lines 6 through page 9, line 25. No new matter is added by this amendment. Accordingly, the teachings of Thatcher et al. do not anticipate the instant claimed invention.

Withdrawal of the rejections under 35 U.S.C. §102 (b) is therefore respectfully requested.

III. Conclusion

Applicant believes that the foregoing comprises a full and complete response to the Office Action of record. Accordingly, favorable reconsideration and subsequent allowance of the pending claims is earnestly solicited.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment, captioned **"Version with Markings to Show Changes Made".**

Respectfully submitted,

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Date: **January 31, 2003**

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the claims:

Claims 1, 4, 7, 9 and 11-13 have been amended as follows:

1. (Twice amended) A composition for delivery of a molecule to the nucleus of a eukaryotic cell comprising a nuclear targeting peptide containing a nonclassical, nuclear localization signal which does not interact with importin-α and importin-β, with the proviso that the nuclear targeting peptide does not contain a classical nuclear localization signal.

4. (Amended) A method of delivering selected molecules to nuclei of eukaryotic cells comprising contacting the eukaryotic cells with the selected molecules and a nuclear targeting peptide containing a nonclassical, nuclear localization signal with the proviso that the nuclear targeting peptide does not contain a classical nuclear localization signal.

7. (Twice amended) A compound comprising:

(a) a cationic peptide scaffold; and

(b) a nuclear targeting peptide containing a non-classical nuclear localization sequence which does not interact with importin-α and importin-β, said cationic peptide scaffold being conjugated to said nuclear targeting peptide via a chemical linkage with the proviso that the nuclear targeting peptide does not contain a classical nuclear localization signal.

9. (Amended) A composition comprising a peptide scaffold, a nuclear targeting peptide containing a nonclassical nuclear localization sequence and a plasmid containing a selected nucleic acid sequence with the proviso that the nuclear targeting peptide does not contain a classical nuclear localization signal.

11. (Amended) A method for expressing a selected nucleic acid sequence in eukaryotic cells comprising contacting cells with a mixture of a selected nucleic acid sequence, a peptide scaffold and a nuclear targeting peptide containing a nonclassical nuclear

localization signal with the proviso that the nuclear targeting peptide does not contain a classical nuclear localization signal.

12. (Amended) A method for expressing a selected nucleic acid sequence in eukaryotic cells comprising forming a complex between a plasmid containing the selected nucleic acid sequence and a scaffold-nuclear targeting peptide conjugate; and contacting cells with the complex with the proviso that the scaffold-nuclear targeting peptide conjugate does not contain a classical nuclear localization signal.

13. (Amended) Eukaryotic cells transfected with a complex comprising a plasmid containing a selected nucleic acid sequence and a scaffold-nuclear targeting peptide conjugate with the proviso that the scaffold-nuclear targeting peptide conjugate does not contain a classical nuclear localization signal.